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## United States Patent [19]

Koiwai et al.

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[54] LENS BARREL HAVING A FLARE
DIAPHRAGM WHICH CAN ADVANCE INTO
AND RETREAT FROM THE OPTICAL PATH
TO ELIMINATE DELETERIOUS LIGHT
RESULTING FROM MOVEMENT OF THE
LENS

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G02B 9/00 [52] **U.S. Cl.** ...... **359/822**; 359/704; 359/739;

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[57] ABSTRACT

In a lens barrel, a flare diaphragm is disposed on an optical path of lenses or in the vicinity thereof such that the flare diaphragm can advance into and retreat from the optical path for cutting deleterious light corresponding to the lenses moving in the direction of the optical axis. This lens barrel can reliably cut deleterious light flux in a simple structure.

23 Claims, 15 Drawing Sheets

